Remarks

Reconsideration of the present application is requested.

Rejections Under 35 U.S.C. § 103

Claims 1-2, 4-8, 10-14 and 16-24 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over 2002/0033789 ("Miyata") in view of U.S. Patent No. 5,027,111 ("Davis"), U.S. Patent No. 5,694,147 ("Gaalema") and further in view of U.S. Patent No. 6,943,768 ("Cavanaugh"). Applicant disagrees with the Examiner's rejection for the following reasons.

At page 3, the Office Action correctly recognizes that Miyata fails to disclose or fairly suggest at least the "heater" of claim 1. The Examiner relies upon Davis to disclose this feature. Office Action at 3. Applicant disagrees.

Davis discloses a liquid crystal display (LCD) unit including a temperature maintaining means (117, 125, 104, 105). The temperature maintaining means maintains the temperature of the LCD 120 within an operating range notwithstanding ambient temperature and humidity variations. In one embodiment, the temperature maintaining means (117, 125, 104, 105) holds the temperature of the LCD 120 between 160°F and - 35°F (= between 71°C and -37.22°C). In another embodiment, the temperature maintaining means (117, 125, 104, 105) holds the temperature of the LCD 120 at least between 120°F and -15°F (= between 48.89°C and -26.11°C) with an ambient temperature between 115°F and -40°F (= between 46.11°C and -40°C).

The temperature-maintaining means includes an external viewing window 117 as well as ducts or plenum formed in side pillars 104, 105. The temperature maintaining means also includes a circulating fan 125 mounted on each side pillar 104, 105.

By even cursory review, however, one can appreciate that Davis does not disclose or fairly suggest a heater "including a plurality of heater electrodes, each of the plurality of heater electrodes being formed as a linear band aligned to be in parallel with a side of the liquid crystal panel" as now required by claim 1.

Moving forward, at page 4 the Office Action relies upon Cavanaugh to disclose "the sensed temperature of the liquid crystal panel being determined by sensing a temperature of a plurality of separate sections of the liquid crystal panel" as required by claim 1.

Cavanaugh discloses a thermal control system for a liquid crystal cell. In one embodiment (as shown in FIG. 4C), the liquid crystal cell 100 includes integrated heater/temperature sensor elements 108A and 108B.

More specifically, column 6, lines 22-36 of Cavanaugh state:

FIG. 4C shows a liquid crystal cell platform 100 having a first glass substrate 110A in opposition to a second glass substrate 110B wherein the first substrate contains an integrated optical element 111, a transparent conductive electrode layer 104A, a liquid crystal alignment layer 109A, a metal gasket element layer 106A, a spacer element layer 107A and an integrated heater/temperature sensor element layer 108A. In this embodiment, the second substrate 110B contains a transparent conductive electrode layer 104B, a liquid crystal alignment layer 104B, metal gasket element layer 106B, a spacer element layer 107B, and an integrated active thermal element, heater/temperature sensor layer 108B.

Further, according to column 9, lines 47-61 of Cavanaugh, a switch 407 selectively engages "the integrated heater/temperature sensor element 108 in a sense or heat mode." In the heat mode, the switch 407 is configured OFF so that a voltage potential is applied to operate the device 108 as a heater.

However, by even cursory review of Cavanaugh, one can appreciate that the heater/temperature sensor elements 108A and 108B are not "formed as a linear band aligned to be in parallel with a side of the liquid crystal panel" as is the case with the plurality of heater electrodes in claim 1. Therefore, the heater/temperature sensor elements 108A and 108B in Cavanaugh do not constitute the plurality of heater electrodes of claim 1. And, Cavanaugh also does not disclose or suggest the "heater" of claim 1.

The Office Action also directs Applicant's attention to portions of Gaalema to disclose other features of claim 1. Specifically, at page 4 the Office Action relies upon Gaalema to disclose "a sensed temperature of the liquid crystal panel to be not more than ±3°C of a predetermined target temperature."

Regardless, however, as one can appreciate from cursory review, Gaalema suffers from at least the same deficiencies as Miyata, Davis and Cavanaugh with respect to claim 1. That is, Gaalema fails to disclose or suggest at least the "heater" of claim 1.

Because none of Miyata, Davis, Gaalema or Cavanaugh disclose or suggest the "heater" of claim 1, even in combination (assuming *arguendo* such a combination could be made, which Applicant does not admit), the references do not render claim 1 obvious. The references fail to render claims 7 and 13 obvious for reasons at least somewhat similar to those set forth above with regard to claim 1.

Claims 2, 4-6, 8, 10-12, 14 and 16-23 are not rendered obvious at least by virtue of their dependency.

Further Art Rejections

The Examiner also continues to reject claims 3, 9 and 15 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Miyata, Davis, Gaalema, Cavanaugh and further in view of U.S. Patent No. 7,106,287 ("Ham"). This rejection is respectfully traversed in that even assuming arguendo that Ham could be combined with Miyata, Davis, Gaalema and/or Cavanaugh (which Applicant does not admit), the resultant combination still fails to render even claims 1, 7 or 13 obvious because Ham suffers from at least the same above-discussed deficiencies as Miyata, Davis, Gaalema and Cavanaugh. Therefore, even in combination, Miyata, Davis, Gaalema and Cavanaugh fail to render claims 3, 9, and/or 15 obvious.

Further, Applicants continue to submit that the arguments regarding claims 3, 9 and 15 set forth in Applicants' December 17, 2008 Amendment are valid. These arguments are incorporated herein by reference.

For at least the foregoing reasons, claims 3, 9 and 15 are patentable over Miyata in view of Davis, Gaalema, Cavanaugh, and further in view of Ham.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of the pending claims in connection with the present application is earnestly solicited.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Andrew M. Waxman, Reg. No. 56,007, at the number of the undersigned listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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